



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0231; Directorate Identifier 2013-NM-163-AD]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-2B16 (CL-604 Variant) airplanes. This proposed AD was prompted by reports of loose, broken, or backed out spur gear bolts on the horizontal stabilizer trim actuator (HSTA). This proposed AD would require a revision to the airplane flight manual, a revision to the maintenance or inspection program, and replacement of HSTAs having certain part numbers. We are proposing this AD to detect and correct loose spur gear bolts on the HSTA, which, if combined with the failure of the primary load path, could lead to failure of the HSTA and subsequent loss of control of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West

Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0231; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Ricardo Garcia, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone (516) 228-7331; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0231; Directorate Identifier 2013-NM-163-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2013-18, dated July 16, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc. Model CL-600-2B16 (CL-604 Variant) airplanes. The MCAI states:

There have been a number of reports where the HSTA [horizontal stabilizer trim actuator] spur gear bolts were found loose, broken or backed out. Investigation revealed that the root cause of the bolt loosening is due to incorrect bending of the anti-rotation tab washer and the improper application of Loctite glue during installation. Loose bolt(s) on the HSTA spur gear combined with the failure of the primary load path, could lead to failure of the HSTA and subsequent loss of the aeroplane.

Bombardier Aerospace has introduced a modified HSTA [part number] P/N 604-92305-5 (vendor P/N 8454-2) to rectify the loose bolt problem. However, this modified HSTA has several quality control problems which could affect safety.

This [Canadian] AD is issued to mandate the replacement of the affected HSTA with the new HSTA P/N 604-92305-7 (vendor P/N 8454-3).

In addition to replacing any HSTA having the affected part number, this proposed AD would require revising both the airplane flight manual and airplane maintenance or inspection program.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0231.

Relevant Service Information

Bombardier, Inc. has issued the service information specified below. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

- Bombardier Temporary Revision 604/37, dated May 21, 2013, to the Bombardier CL-604 Airplane Flight Manual, PSP 604-1.
- Bombardier Temporary Revision 605/18, dated May 21, 2013, to the Bombardier CL-605 Airplane Flight Manual, PSP 605-1.
- Bombardier Revision Submission RS-CL604-055, dated April 27, 2012, to the Bombardier CL-604 Airplane Flight Manual, PSP 604-1.
- Bombardier Revision Submission RS-CL605-030, dated April 27, 2012, to the Bombardier CL-605 Airplane Flight Manual, PSP 605-1.
- Bombardier Service Bulletin 604-27-032, dated September 10, 2012.
- Bombardier Service Bulletin 605-27-002, dated September 10, 2012.

Clarification of Document Date

Canadian Airworthiness Directive CF-2013-18, dated July 16, 2013, states that Bombardier Revision Submissions RS-CL604-055 and RS-CL605-030 are dated April 30, 2012; however, the date that appears on those documents is April 27, 2012. We contacted Bombardier and verified that the dates on the documents are correct.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

This proposed AD would require revisions to certain operator maintenance documents to include new actions (e.g., inspections). Compliance with these actions is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this proposed AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to the procedure specified in paragraph (l)(1) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Costs of Compliance

We estimate that this proposed AD affects 125 airplanes of U.S. registry.

We also estimate that it would take about 21 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-

hour. Required parts would cost about \$0 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$223,125, or \$1,785 per product.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Bombardier, Inc.: Docket No. FAA-2014-0231; Directorate Identifier 2013-NM-163-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model CL-600-2B16 (CL-604 Variant) airplanes, certificated in any category, serial numbers 5301 and subsequent, equipped with horizontal stabilizer trim actuator (HSTA) part number (P/N) 604-92305-3 (vendor P/N 8454-1) or P/N 604-92305-5 (vendor P/N 8454-2).

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Reason

This AD was prompted by reports of loose, broken, or backed out spur gear bolts on the HSTA. We are issuing this AD to detect and correct loose spur gear bolts on the HSTA, which, if combined with the failure of the primary load path, could lead to failure of the HSTA and subsequent loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Airplane Flight Manual (AFM) Revision

Within 30 days after the effective date of this AD, revise the Normal Procedures section of the applicable Bombardier AFM to include the information in the applicable temporary revision (TR) specified in paragraph (g)(1) or (g)(2) of this AD. The TRs introduce revised procedures for the stabilizer trim system check. Operate the airplane according to the limitations and procedures in the applicable TR. The revision may be done by inserting copies of the applicable TR specified in paragraph (g)(1) or (g)(2) of this AD in the AFM. When the TR has been included in the general revisions of the AFM, the general revisions may be inserted in the AFM, provided the relevant information in the general revision is identical to that in the applicable TR and the TR may be removed.

(1) Bombardier TR 604/37, dated May 21, 2013, to the Bombardier CL-604 AFM, PSP 604-1.

(2) Bombardier TR 605/18, dated May 21, 2013, to the Bombardier CL-605 AFM, PSP 605-1.

(h) Maintenance or Inspection Program Revision

Within 30 days after the effective date of this AD: Revise the maintenance or inspection program, as applicable, by incorporating Task 27-41-00-101, Operational Test (BITE) of the Horizontal-Stabilizer Trim-control System (HSTCS), specified in the applicable revision submission (RS) specified in paragraph (h)(1) or (h)(2) of this AD. The initial compliance time for the operational test is within 100 flight hours after the effective date of this AD. The maintenance or inspection program revision may be done by inserting a copy of the applicable RS specified in paragraph (h)(1) or (h)(2) of this AD into the applicable time limits/maintenance checks (TLMC) manual. When the RS has been included in the general revisions of the TLMC manual, the general revisions may be inserted in the TLMC manual, provided the relevant information in the general revision is identical to that in the applicable RS, and the RS may be removed.

(1) Task 27-41-00-101, Operational Test (BITE) of the Horizontal-Stabilizer Trim-control System (HSTCS), specified in Bombardier Revision Submission RS-CL604-055, dated April 27, 2012, to Section 5-10-40, Certification Maintenance Requirements, of Chapter 5 of the Bombardier CL-604 Time Limits/Maintenance Checks (TLMC) Manual.

(2) Task 27-41-00-101, Operational Test (BITE) of the Horizontal-Stabilizer Trim-control System (HSTCS), specified in Bombardier Revision Submission RS-CL605-030, dated April 27, 2012, to Section 5-10-40, Certification Maintenance Requirements, of Chapter 5 of the Bombardier CL-605 TLMC Manual.

(i) No Alternative Actions or Intervals

After the maintenance or inspection program has been revised, as required by paragraph (h) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (l)(1) of this AD.

(j) HSTA Replacement

For airplanes equipped with an HSTA having P/N 604-92305-3 (vendor P/N 8454-1) or P/N 604-92305-5 (vendor P/N 8454-2): Within 3,000 flight hours or 26 months after the effective date of this AD, whichever occurs first, replace any HSTA having P/N 604-92305-3 (vendor P/N 8454-1) or P/N 604-92305-5 (vendor P/N 8454-2) with an HSTA having P/N 604-92305-7 (vendor P/N 8454-3), in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 604-27-032, dated September 10, 2012; or 605-27-002, dated September 10, 2012; as applicable.

(k) Parts Installation Prohibition

As of the effective date of this AD, no person may install any HSTA having P/N 604-92305-3 (vendor P/N 8454-1) or P/N 604-92305-5 (vendor P/N 8454-2) on any airplane.

(l) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA,

New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they were approved by the State of Design Authority (or its delegated agent, or by the Design Approval Holder with a State of Design Authority's design organization approval, as applicable). You are required to ensure the product is airworthy before it is returned to service.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2013-18, dated July 16, 2013, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0231.

(2) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. Issued in Renton, Washington, on April 1, 2014.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2014-08463 Filed 04/14/2014 at 8:45 am; Publication Date: 04/15/2014]